## Asteroid Absolute Magnitudes and Slope Parameters .... E. F. Tedesco

One of the most fundamental observational parameters for asteroids is their absolute magnitudes. Their most common use is in predicting apparent brightness but they are also used in computing the albedo and diameter given observations of the thermal flux, and in deducing bias-correction factors.

A new listing of absolute magnitudes (H) and slope parameters (G) has been created and published in the Minor Planet Circulars; this same listing will appear in the 1992 Ephemerides of Minor Planets. Unlike previous listings, the values in the current list were derived from fits to data at the V band. Approximately 5,200 photoelectric observations (obtained from about 200 papers published between 1949 and 1990) and 34,000 reliable photographic observations (obtained from B. Marsden and based on observations made between 1934 and 1990) were used in the analysis.

All observations were reduced in the same fashion using, where appropriate, a single basic default value of 0.15 for the slope parameter. Distances and phase angles were computed for each observation. The data for 113 asteroids were of sufficiently high quality to permit derivation of their H and G.

These improved absolute magnitudes and slope parameters will be used to deduce the most reliable bias-corrected asteroid size-frequency distribution yet made.